divided. The first change in a nerve following a lesion is a change in the staining qualities of the fibrils; following this the fibrils themselves degenerate. The degenerated fibrils form large granular bodies, which break down into smaller ones, and later are absorbed. The perifibrillary substance shows granular changes. JELLIFFE.

204. WEITERER BEITRAG ZUR LEHRE VON DER ACUTEN NICHT-EITRIGEN ENCEPHALITIS UND DER POLIENCEPHALOMYELITIS. (A Further Contribution to the Study of Acute Non-purulent Encephalitis and of Poliencephalomyelitis). H. Oppenheim (Deutsche Zeitschrift für Nervenheilkunde, Vol. 15, 1899, Nos. 1 and 2, p. 1).

An anemic girl, of sixteen years, had headache, loss of appetite, and gastric disturbance for several weeks. Headache became more severe, and vomiting, vertigo, chills and fever were added to the symptom-complex. The left abducens became paretic. The left side of the neck and head and the mastoid process of the left side were very sensitive to pressure, and the presence of empyema of the mastoid process and sinus thrombosis was suspected, although the otoscopic examination was negative. Operation revealed nothing abnormal in the region of the mastoid process, but four days later complete motor aphasia and right facio-brachial monoplegia developed. Other symptoms were noted. A diagnosis of non-purulent encephalitis was made, chiefly from the combination of focal signs with the symptoms of a general febrile disease. The patient died after a few months from purulent meningitis; and in addition to the lesions of this disease, two sclerotic foci—evidently the remains of lesions that had caused the focal symptoms—were found in the left third frontal gyrus and the foot of the anterior central convolution. This case shows that acute non-purulent encephalitis is not always fatal. The spontaneous pain and pain on pressure in the region of the left ear, that led to the mistaken diagnosis of mastoid disease, and the presence of abducens paresis, were interesting features in a case of encephalitis.

In a second case, in which the diagnosis of poliencephalomyelitis was made, the lesions were very slight. Diminution of the electrical reaction in the masseter muscles, incontinence of urine, absence of symptoms of exhaustion, and absence of remissions, were employed in diagnosticating between poliencephalomyelitis and asthenic bulbar paralysis. A lymphosarcoma in the anterior mediastinum was believed to be the source of toxic products. SPILLER.

205. NOTES ON THE CHROMOPHILIC MATERIAL IN THE MOTOR CELLS OF BRAIN AND CORD, NORMAL (ANIMAL) AND PATHOLOGICAL (HUMAN), AND OF THE REACTION (ACID OR ALKALINE) OF THE CORTEX AND CEREBROSPINAL FLUID. John Turner (Brain, 22, 1899, p. 100).

The author presents the results of a number of studies on various points connected with the chemistry of chromophilic bodies. In a first series of observations he concludes:

1. Chromophilic material in the form of Nissl bodies is met with in animals immediately after killing and in human beings at least seventy minutes after death, when the nervous substance has merely been colored by a solution of methylene blue in normal salt without any further addition of reagents.

2. The fact that in some forms of diseased nerve cells the Nissl bodies show a gradual attenuation so that they dwindle down from bulky spindles and blocks to the finest imaginable threads is opposed to the idea that they are produced by precipitation after death.

3. The reaction of the cortex varies with different indicators, showing that it contains both acid and alkaline substances.

4. Its variations are constant, whether tested two hours or forty-four hours after death, and are as follows: acid to phenolphthalein and litmus, alkaline to methyl orange.

5. With animals killed and immediately tested, the gray matter gave similar reactions to phenolphthalein and methyl orange, but was alkaline to litmus.

6. The reactions of the cerebrospinal fluid differ from the cortex, in that both litmus and alkaline reaction is obtained. Otherwise they are the same. These results do not differ, whether the fluid is tested seventy minutes or forty-four hours after death.

7. Lactic acid is present always in cerebro-spinal fluid after death, and appears to increase with the length of the interval which has elapsed between the time of death and the time of testing.

In a second part he contributes some observations on mental cases of a cursory nature with conclusions which have been reached before by numerous other observers. JELLIFFE.

206. THEORIE CEREBRALE DE LA RESPIRATION DE CHEYNE-STOKES (Theory of the Cerebral Origin of the Cheyne-Stokes Respiration). Rabé (La Presse médicale, May 13, 1890, No. 32, p. 227).

The first theory of this type of respiration was suggested by Traube, who believed that the respiratory center in the medulla was exhausted, and could only be stimulated by the accumulation of a large amount of carbon dioxide in the body. Filehne suggested that vasomotor innervation might have something to do with the condition. The apnea was the result of super-oxygenation, and the period of rapid respirations the result of an excess of carbon dioxide. Grasset suggested that the medullary centers were unduly susceptible to irritation, and reacted, therefore, with more than normal vigor; they became, however, readily exhausted, and the period of apnea corresponded to the stage of recovery. Franck called attention to the fact that in this type of respiration most of the patients were in a state of stupor, and Riche demonstrated that normally we inspire more air than is actually needed. Pachon subsequently undertook to study the respiratory movement among the insane, and found that the respiration rhythm was accentuated in the psychoses with hyperideation, or in cases of hallucinatory crises. In one patient, a woman suffering from melancholia and feeble intellect, the respiration was periodic. Pachon, therefore, suggested the cerebral origin of the Cheyne-Stokes rhythm, and called it a simple respiratory delirium. This theory accords well with the rhythm observed in various mental symptoms. SAILER.

207. A STUDY OF LEUCOCYTOSIS ASSOCIATED WITH CONVULSIONS. F. G. Burrows (Am. Journ. Med. Sciences, vol. 117, 1899, p. 503).

The author from a few cases of convulsive seizures, in 3 cases of general paresis, 1 of catatonia, 1 of puerperal eclampsia, and three of various dementias, has drawn the conclusions that there is a leucocytosis associated with convulsive states not only in general paresis, but in various other diseases as well, and that the leucocytosis bears a relation to the severity of the seizure. He further claims that this leucocytosis is in part due to the muscular work done during a convulsion—a part which, owing to its physiological character and its short duration, has been shown to be superimposed upon pathological leucocytosis of longer duration. JELLIFFE.